SMART SHIP
Integrated
Bridge System
(IBS)

LINCOLN and GW CVBG ECDIS-N

6-7 September 2001

- **System Overview**
- **Installation**
- **Training**
- **ECDIS-N Certification**

INTEGRATED BRIDGE SYSTEM

- **Voyage Management System (VMS) -** *A computer based navigation, planning and monitoring system. It is supported by the Electronic Chart Display and Information System - Navy (ECDIS-N). Together they provide a means to perform navigational functions automatically.*

- **Automated Radar Plotting Aid (ARPA) -** *System that automatically acquires and tracks contacts; providing accurate and timely contact information to the Watch Team.*

- **Ship Control System (SCS)** *- System which provides Command and Control Signals to the Ship Control and Propulsion Systems and monitors their performance.*

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![SmartShip Program logo]

VMS
DISPLAY AND FUNCTIONALITY
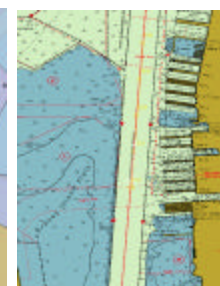

Visual Bearing LOP Fix

IMO / IHO Compliant ECDIS Workspace

- **ECDIS-N Functionality**

- **Electronic Display of Charts**
  (NIMA DNC, RNC, BA)

- **Precision Anchoring**

- **On Board Trainer**

Digital Chart Formats

NIMA
Digital Nautical
Chart (DNC ®)

NOAA
Raster Nautical
Chart (RNC)

IHO S-57

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- **ORD approved JUL 00 (ECDIS-N)**

- **DT- OT plan in place**

- **Land Based Engineering Site**

- **TEMP approved APR 01**

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CG INSTALLATION

- **OA completed May 01**

- **TECHEVAL Scheduled for Sep 01**

- **Shock and Vibration Qualification Testing Scheduled for Fall 01**

- **OPEVAL Scheduled for Jan 02**

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SMARTSHIP FIELDING PLAN

| 96 | 97 | 98 | 99 | 00 | 01 |

YORKTOWN

LBES

TICONDEROGA

MONTEREY

MOBILE BAY

VALLEY FORGE

IBS VMS TEST AND EVALUATION TIMELINE

- **VMS 5.0 installed in CG 61**
- **Engineering release of VMS 6.0 Oct 01 (Navy Testing)**
- **Final release of VMS 6.0 Dec 01**
  - NIMA DNC direct read certified
  - ECDIS-N Functionality
- **OPEVAL 23 Jan – 01 Feb**
- **FOT&E**
- **ECDIS-N Certification**
- **CVBG deployment Jun and Jul 02**

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CG 53 & CG 61
IBS TRAINING

- **INSTALLATION TRAINING** ✓
- **ONBOARD TRAINER (OBT)** ✓
- **INTERIM TRAINING** ✓
- **LIFE CYCLE TRAINING** ✓
- **ECDIS-N TRAINING DELTA** ✓

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- **Sperry Marine provided 2 weeks of operator and maintenance training (Combination of Classroom and Hands-On)**

- **Training covers:**

	Operations	Maintenance
VMS/ECDIS	✓	✓
ARPA	✓	✓
SCS	✓	✓

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Training Location	Title and CIN	Training Level	Officer/ Enlisted
SWOSCOLCOM	Major Command Prospective Commanding Officer (PCO) Course (CIN: A-4H-0110)	FAM & ISA	Officer
SWOSCOLCOM	Prospective Commanding Officer (PCO) Course (CIN: A-4H-0111)	FAM & ISA	Officer
SWOSCOLCOM	Prospective Executive Officer (PXO) Course (CIN: A-4H-0112)	FAM & ISA	Officer
SWOSCOLCOM	SWO Department Head Course (CIN: A-4H-0107)	FAM & ISA	Officer
SWOSCOLCOM	SWO Core Phase 1 Operations and Combat Systems Fundamentals (CIN: A-4H-0154)	FAM & ISA	Officer
FCTCLANT	Operations Specialist Class "A" School (CIN: A-221-0011)	FAM & ISA	Enlisted (OS)
SERVSCOLCOM	Quartermaster Class "A" School (CIN: A-061-0012)	FAM & ISA	Enlisted (QM)
FTC San Diego/Norfolk	Navigator/Senior Quartermaster Refresher (K-2G-2207)	FAM & ISA	Officer and Enlisted
FTC San Diego/Norfolk	ECDIS-N Operator Course	FAM & ISA	Enlisted

READY FOR TRAINING (RFT) – FEB 02

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- **Supports Installation & Interim Training**
- **Provides Training Capability**
  - Onboard CG 47, CG 50, CG 53 & CG 61
- **Provides:**
  - Familiarization with GUI
  - Teaches "buttonology" and software functionality

LINCOLN AND GW IBS ECDIS-N TRAINING

- CG 61 & 53 INTERIM TRAINING
  - 2 WEEKS
  - OPERATOR & MAINTENANCE

- PEO TSC INCORPORATING ECDIS-N DELTA TRAINING INTO INTERIM TRAINING CURRICULA

- PEO TSC INCORPORATING IBS INTO ECDIS-N OPERATOR TRAINING COURSE CURRENTLY IN DEVELOPMENT FOR FTC'S

- **All ECDIS-N requirements in OPNAV INST 9420.2 Encl (1) will not be met by Target Configuration Date (TCD)**

  - LINCOLN   10 Dec 01
  - GW   10 Feb 02

- **Waivers required per CLF/CPF INST 4720.3A**

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- **Current Architecture requires modification to support classified charts**
- **Investigating Engineering Changes to support classified charts**

- **Smartship Program of Record Includes Integrated Bridge System VMS**

- **IBS VMS installed in CG 53 and CG 61**

- **ECDIS-N VMS software release Dec 01**

- **ECDIS-N delta training will be provided to CG 53 and CG 61**

- **ECDIS-N Certification Process**

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